

No. XIX.—AN UNUSUAL SWARM OF MOTHS.

The Society recently received a number of moths which were said to be swarming in very large numbers round the cantonments at Amballa. Lt.-Col. J. Patterson in forwarding the specimens wrote:—

“Numbers are found every morning in dark corners, such as behind pictures, inside topees, behind almirahs, curtains, etc. They get into strange places such as chests of drawers, the only way to which is by entering at the bottom of the chests of drawers, and passing up between the back of the drawers and the back of the piece of furniture. I do not think they can breed out in the drawers.

I have asked the inhabitants here and they say that they have never seen anything like these numbers of moths.”

The moths were examined by Mr. T. R. Bell who identified them as follows:—The moth is *Agrates flammata*, Fabricus; in England it is called the Black-collar and is very rare. It is there known as *Noctua flammata*; I believe its new generic name is *Rhycia*. I do not know anything about the local food plant but it is probable that it feeds upon any low plant. The food plant in Europe is the Dandelion, *Taraxacum densleonis* and Strawberry (*Fragaria*). The larva is certain to pupate underground in the earth like others of the type. In some years it is certain to find that certain species of moths turn up in enormous numbers even though, ordinarily, they may be scarce. It depends mostly, I think, on absence of Natural enemies (Ichneumons, etc.) combined with suitable climatic conditions.

No. XX.—OCCURRENCE OF THE GALEOD SPIDER (*RHAGODES NIGROCINTUS*) IN THE SOUTH ARCOT DISTRICT, MADRAS PRESIDENCY.
(With a photograph.)



It may be of interest to your readers that a male specimen of *Rhagodes nigrocintus* (*Galeodidae*, Arachnida) was obtained last September at Gingee in the South Arcot District of this Presidency.

The interest of the specimen lies in the fact, I believe, that it is the second specimen of the species on record and the first male specimen. The female specimen through which the species is known is recorded from Vellore and is in the British Museum (*vide* J. B. N. H. S., Vol. IX, p. 452). The present specimen is in the Indian Museum.

I may state that I am confirmed in my identification by Dr. Gravely of the Madras Museum.

DEPARTMENT OF ZOOLOGY,
MADRAS CHRISTIAN COLLEGE,
29th July 1921.

S. G. MANAVALARAMANUJAM.

No. XXI.—A CASE OF PLANT SURGERY.

There is an old gigantic Baobab tree (*Adansonia digitata*) probably more than 300 years old, since the offenders sentenced to death at the time of Ali Adilshah, were executed on this tree (Bijapur Gazetteer); for which reason the tree is still known as "The Execution Tree".

The tree has a very thick stem with a girth of 49 ft. at 3 ft., 50 ft. at 6 ft., and 58 ft. at 10 ft. from the ground. The largest measurement of *Adansonia digitata*, as stated by W. B. Bannerman from Madras in 1904, is 48'-2".* The tree divides into 3 huge branches at about 10 ft. from the ground. The whole tree covers an area of 10 gunthas. Thus it presents a huge appearance in the compound and attracts the notice of every passer-by.

Being old, this tree was naturally attacked badly by rot and the main trunk near the base, where there was a hole, and the whole of the heart of tree had disappeared.

Being afraid of losing the tree, Mr. Elliot, the District Judge, first applied to the Private Secretary to His Excellency the Governor of Bombay for steps to be taken to rejuvenate the tree. The correspondence was forwarded by the Director of Agriculture, Bombay Presidency, Poona, to the Economic Botanist to the Government of Bombay, Poona, and I was deputed for the work.

Being encouraged by the successful results of similar work done on Casuarina and other trees in the Ganeshkind Botanical Gardens, Kirkee, I went there and observed the tree. In the base, a hollow was found of the dimensions of 15 feet by 17 ft. It was conical in shape. The following operations were made during the first week of September 1920. The hollow was filled in with rubble and mud and concreted over. The affected parts were first cut out and it was found that the rot was due to the grubs of a large beetle. Hundreds of these grubs were cut out of the tree. As soon as the wound edges were cut down to sound wood, the wound was tarred over and then filled in with concrete. All other parts which showed signs of attack or susceptibility to it, within a short time were tarred over and any spot where water was likely to lodge was filled in with concrete.

The District Judge was pleased to remark in his letter, dated the 10th February 1921, addressed to the writer as follows:—

"The result has been a most workman-like job and the tree this year, though a famine year, at once reacted by producing a far finer foliage than was noticeable the year before. The whole job has been satisfactorily done and attracted a large crowd who had never seen such a surgical operation on a tree before."

* Journal, Bombay Natural History Society, Vol. XV, p. 718.